International Journal of Civil, Structural, Environmental and Infrastructure Engineering Research and Development (IJCSEIERD) ISSN(P): 2249-6866; ISSN(E): 2249-7978 Vol. 6, Issue 4, Aug 2016, 29-40

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MULTIMODAL TRANSPORTATION SYSTEM ANALYSIS TO

SUPPORTING URBAN AREAS DEVELOPMENT

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ABSTRACT

Development of urban transport system is purposed to improve the quality and quantity of transport services by regarding the linkages between transportation needs and services Tirrenus in integration between modes transportion. Transportation system is a very important as a requirement in the interaction and mobility of commuters in urban areas. Development of urban areas can not be separated to various of facilities and transportation infrastucture, hence, the implementation of urban transport system needs to be integrated intermodal to improve accessibility Effectively and efficiently in urban areas.

This study Aimed to analyze the multi-modal transportation system and formulate some strategies for supporting the development of urban areas. This research is located in South Konawe, Including modes of land, sea and air transportation. In addition, the methods used in this research were qualitative and quantitative analysis, Aimed to describe systematically and carefully about the circumstances and needs that occur in communities. To Obtain Data and information accuratelly, so the research was conducted by a direct survey.

The results Showed the integration of land, sea and air transportation has not yet maximized to connect Among regions within urban areas. One side, the mode of transportation used mostly by land transportation has Showed a poor quality level of services as some factors affected, such as damaged roads, poor public transports, and bad funcional terminals. Another side, the existing of land and sea transportation that should support a conectivity of land transportation Among regions has not been optimal yet to be utilized by people. Indeed, the urge strategies to be implemented aredeveloping of network infrastucture, improving the level of services as well as integrated for all modes of transportation, and enhancing cross-sectoral coordination between regions.

KEYWORDS: Transportation, Strategy, Development, Multi Modal, Urban Areas

Received: Jun 02, 2016; Accepted: Jul 02, 2016; Published: Jul 08, 2016; Paper Id.: IJCSEIERDAUG20164

INTRODUCTION

Urban transport system has an important role in supporting the mobility of the population of an area, it makes the role of urban public transport as a strategic aspect to accommodate community activities. Care needs of urban transport systems is a result of increased activity konsekuesi population movements within an urban area. Garling et al. (2002) says that the increased activity of the movement of the population will increase demand for transportation use and impact on the level of public transport services, to improve services in an urban area needs to be done with the development of a sustainable transport system. Fuji and Kitamura (2000) says that the urban areas trying to develop a transportation system with a major investment costs to make it more competitive on the

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level of public transport services, but an increase in the provision of facilities and infrastructure (qualitative or quantitative) do not automatically improve satisfaction for users of public transport.

Development of transport system improving the accessibility and mobility of population movement to be smooth, open relations with the outside area, making the local economy into the open, encourage increased incomes and welfare of local communities and reduce inequalities between wilayah. Untuk connecting one region can not rely on one mode of transport, but requires a multi-modal transportation system that is land, sea, and air are integrated. It required a multi-modal transportation system organized system of unity, to be a guide and a foundation in the development of transport in order to realize the provision of transport services are effective and efficient. Based on this, then the problem used as material for the study to analyze the multi-modal transportation system at the moment and formulate a development strategy to support the development of the transport system in urban areas.

LITERATURE

Transportation Systems

The transport system is a system to perform a movement from one place to another. The transport system aims to move an object either inanimate objects, or objects such as human life. The transport system there are some basic components that function in the transport system, the basic components of the transportation system consisting of cargo (objects) are transported, the vehicle is moving things, track the movement of objects or vehicles consisting of segments and points, terminals to move the contents of a lane to another lane, and transportation management includes operational planning, information and control, as well as maintenance of the road network. The components of the transportation system will be interconnected and influence each other. The transportation system in the operation of its services required in the implementation of a planning technique to find the optimal combination in terms of the provision of means of public transport (MorIok, 1991).

Urban transport systems form the basis of economic development of society as a whole in an area (Murray, 2001). The public transport system is developed to be more competitive with other modes of transport, with provision of facilities and infrastructure of urban transportation systems. In developing a public transport system, how to move people in large numbers to support the mobility of society, in particular access to employment, trade, education. The condition and capacity of public transport do not meet the demand for public transportation is not adequate, the road network, and high travel costs for people using the public transport system (Armstrong, et al. 1987).

In a transportation system activity, there are components that affect it. The components can have different functions according to the shape and type of the component itself. According Sinulingga, (1999), that the transportation component is the condition of the infrastructure and network systems and facility conditions (vehicle). Infrastructure is sesutau be a medium for the activities of transportation, such as highways, railways, terminals, ports, bus stop, river, sea, pipeline, air and so on. While the tool is something tangible vehicle serves as a tool to move something both people and goods to achieve its objectives. Means may include buses, trains, airplanes, ships, boats and so on. In order transport activities can be implemented in a nice, safe, orderly and smooth as you wish, it is necessary to plan the operation or procedure binding arrangement. Public transportation is an important component in the overall process of managing urban transport systems are even considered as an instrument of spatial development policies that can improve and enhance the shape of the city (Murray, 2001; Gwilliam, 2008). Therefore, Warpani (2002) argued that an urban area that has had a population of more than one million people should have a public transport system that is efficient, the public transportation

system that is capable of integrated not only operationally but also integrates with various sectors both economic, social, and environmental (Hull, 2005; Santos et al, 2010).

Regional Development and Transport

Adisasmita, R., (2008) says that the development of the area as development efforts in a region or several regions to achieve the welfare of society by utilizing resources (natural, human, institutional, technological and infrastructure) are effective, optimal and sustainable manner moving the productive activities (primary sector, secondary and tertiary), provision of service facilities (economic and social), the provision of infrastructure and facilities and the environment. Overall the effort aimed at the improvement in the level of welfare of the community in general can be seen as the cause of the ongoing process of development of the region.

Jayadinata (1986) stated that the construction or development is an attempt to improve or fix or improve something that already exists in the region for the prosperity and welfare of the community, which may include socio-economic development. Meanwhile, according to Hadjisarosa (1994) development of the territory was an act of developing the area to be more developed. Development of the region may include such efforts that are improving resource utilization as well as improve compliance with the various requirements of the region. Overall the effort aimed at the improvement in the level of welfare of the community in general can be seen as the cause of the ongoing process of development of the region.

Development Strategy

According Hajisarosa (1980), strategy development as the elaboration of measures need to be implemented to achieve the target. So the strategy and goals is a process that is interactive, because the strategy must always be associated with the target. One alternative strategy that should be done in the planning area is the realignment of service centers and settlements as well as other non-cultivated area and improving transport facilities and infrastructure that enable the accessibility proportional throughout the territories. Further said that the development strategy is a step that needs to be taken to achieve a state of equilibrium, albeit with a low level of alignment.

RESEARCH METHODS

This is a descriptive study with qualitative and quantitative approach, which aims to describe a systematic, thorough and accurate information on the conditions, circumstances, desires and symptoms that occur in the community. The activities are to identify the availability of existing road network, community needs regarding facilities and prasaranatransportasi, socioeconomic conditions, and a variety of data obtained for analysis so as to produce a proposal or alternatives in dealing with the problems faced. The study design was worked out with the survey method or directly to the location of the research, with the aim to obtain data and information that is more accurate.

This study was conducted in South Konawe, transportation systems covering land, sea and air. The transportation system is an important aspect in promoting development in South Konawe as wilayah. Penelitian featured modes is done based on the level of demand data and analytical tools that are used. The data on the patterns of movement of people from one area to another is done by direct observation, while the secondary data on the development of regional growth (demographic, economic, farming, agriculture, and others) used the data of the last of the potential of the area.

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RESULTS AND DISCUSSIONS

Condition Transportation Systems

Land Transportation Modes

• Network Infrastructure

Construction and development of the road network in the region remains a priority in the development program at this time, given the existence of the road network will provide convenience to the public to perform its activities. Therefore, the construction of the road network in South Konawe is one of the fundamental needs related to socio-economic development of the region and its inhabitants. Primary and secondary road network throughout 1057.71 km, which is composed of the national road that connects between Provincial 202.06 km, the province as a liaison between the District 78.2 km and 777.45 km of district roads connecting between the urban area, between the districts and villages. For the length of the road based on road conditions shown in Table 1.

Table 1: Length of Road According to the Road Condition

Road Conditions	Length of Road			Total	
Road Colluitions	National	Provincial	District	Total	
Good	66,38	40,2	286,83	393,41	
Medium	75,48	17	257,09	349,57	
Damaged	7,1	12	149,67	168,77	
Heavy Damage	53,1	9	83,86	145,96	
Total	202,06	78,2	777,45	1.057,71	

Source: Office of Public Works South Konawe

General state of the road network is damaged, it can be the cause barriers to movement of people and goods within the scope of internal and external. The other impacts are relatively high transportation costs and the decline in transport services. Based on Minimum Service Standards road network, then obtained the accessibility of 0.2. Thus, the level of service currently South Konawe the area is the low category, if it is associated with the density of population in 2015 amounted to 54.06 inhabitants / km2.

Accessibility level of 0.2 or equivalent with a population density of 100 inhabitants/km2 indicated that future road improvement South Konawe still the main priority. Extra long way done in accordance with the number of people, as well as the developmental needs of the region, especially the development of settlements and the construction sectors of the other economy. While degree of population mobility on road length obtained in the category of 4.3 or higher. In this condition, the level of population mobility South Konawe equivalent to the level of mobility of the population with a GDP per capita of> 5 million / capita that are in high positions. While GDP per capita population South Konawe Rp. 9,524,400.45. This shows that the mobility of people internally and externally very well and provide greater opportunities in order to support community activities in improving the welfare of the population.

• Network Services

One of the factors that determines the height of vehicle ownership in an area is the availability of the road network. A vehicle is a means by which to carry out the transport process. Road transport services South Konawe associated with the availability of road infrastructure is pretty good, considering all the capital district can be reached by road transport modes. The number of vehicles owned by people from South Konawe is 8184 units and motorcycles, including the most is 6,468 units or 79.03%, pick up 768 units or 9.38%, minibuses 647 units or 7.90%, trucks 247 units, or

3, 01%, sedan 27 units or 0.32%, and bus 16 units or 0.19%. For more details can be seen in Table 2.

Total

Currently there is no terminal type B South Konawe cause the passenger to sub-districts are at terminals in Kendari ie Baruga terminal and terminal Wua-Wua. For rural transport South Konawe currently lacking and trayeknya yet. To reach the villages that exist, people usually use taxis or freight transport of goods such as cars and pick up trucks as shown in Figure 1.

Num	Type / Vehicles	Amount (Units)	%
1	Motorcycles	6.468	79,03
2	Private Car	27	0,32
3	Minibus	647	7,90
4	Pick up	768	9,38

Table 2: Type of Vehicle South Konawe District

247 Truck 3,01 Tankers Vehicle 6 0,13 Bus 16 0.19

Source: Transportation South Konawe District 2009

8.184

100



Figure 1: Baruga (Sub District) Terminal

Marine Transportation Modes

Network Infrastructure

Transport infrastructure networks crossing is crossing provided a good cross pairs and across more than one partner. For Torobulu port already has a movable bridge which is a mobile bridge that serves as a door propped up against the ship, so that the vehicle up and down no trouble at low tide. The ferry port is also equipped with a parking lot for vehicles that will cross over, the terminal waiting room, clean water and harbor office.

Network Services

Ferry crossing the harbor Torobulu-Tampo (Muna District), is an inter-island transportation, which is located in District Lainea precisely in Punggaluku route are scheduled every day. Classification Torobulu-Tampo ferry port for Southeast Sulawesi province, is a class II (cross Regency / City). Transportation crossing Torobulu-Tampo which operates 2 KMP KMP Semumu and Nuku with travel time for 2.5 hours. KMP capacity is 250 passengers with a crew of 20 people the type of ro-ro ferry 600 GRT. Capacity for passenger ships is still insufficient. Ferry departure schedule three times a day is 09:00, 11:00, 16:00 pm every day are shown in Table 3.

www.tjprc.org editor@tjprc.org The number of passengers through the Port Torobulu-Tampo in Table 3 show that passengers each year has increased, in 2015 as many as 255 274 people. This case shows the sea port is Torobulu-Tampo very important in the movement between districts. With the above conditions will require the development of sea ports as major transportation infrastructure in South Konawe. Development of sea ports can improve and facilitate the mobility and distribution of basic needs of the population between the archipelago in Southeast Sulawesi Province. as shown in Figure 2.

Table 3: Number of Passengers Port Torobulu-Tampo

Ferry Route	Travel Time (Hours)	Years	Number of Passenger	
		2010	126.916	
		2011	145.953	
Torobulu-Tampo		2012	167.846	
	2,5 Jam	2013	193.023	
		2014	221.977	
		2015	255.274	

Source: Department of Transportation, Southeast Sulawesi Province



Figure 2: Ports of Torobulu

Air Transportation Modes

Network Infrastructure

Air transport infrastructure today is, air Bandaraa Haluoleo in Sub Ranomeeto a distance of \pm 10 km from the Capital City of Kendari in Southeast Sulawesi or \pm 60 km from the center of the capital Andoolo South Konawe. This access passes through the area of settlements. The airport is the main Airport in the region of Southeast Sulawesi Province which serves as a supporting Bandaraa / center of distribution and use to the public. The airport Haluoleo an inter-regional transport lines in Indonesia and air transportation of Cities in Southeast Sulawesi as shown in Figure 3.



Figure 3: Haluoleo Airport

The airport Haluoleo has undergone several physical changes, both territories passenger terminal, cargo terminal, user aerobridge (garbarata), facilities runway (runway), apron, and the air space. The passenger terminal continues to change and increase the use of facilities such as escalators from the terminal check-in to the reception area, the construction of the arrivals and departures of international lodging when the airport is in compliance with specifications

and an international airport. Run has a long way to $2,500 \times 45$ meters and has a runway strength 35F / C / Y / T (PCN). The air parking (apron) and a runway too (runway) also has encountered several overlay (thickening asphalt). Haluoleo airport is now expanding the airport apron, and the current airport apron can accommodate six wide-bodied aircraft at once, such as type Boeing 737-400, Boeing 737-500, McDonnell Douglas MD-82, Boeing 737-800NG, Boeing 737-900ER

Network Services

Air transport development policy carried out to support the existence of the Province of Southeast Sulawesi, as one of the distribution services that support the flow of passengers, trade, and tourism. This policy is realized by improving the capability and performance of the airport facilities so as to create a regular air service, safe, fast, and efficient as an integrated system. Haluoleo service has undergone several physical changes, both territories passenger terminal, cargo terminal, user aerobridge (garbarata), runway (runway), apron, and the air space. The passenger terminal continues to change and increase the use of facilities such as escalators from the terminal check-in to the reception area, the construction of the arrivals and departures. As for aircraft and passenger traffic through the Haluoleo airport can be seen in Table 4.

Aircraft Traffic Passenger Year Arrival Departure **Arrival** Departure 2011 2.686 2.686 325.771 336.697 $201\overline{2}$ 3.371 3.370 429.707 426.837 5.299 2013 5.299 435.527 453.837 2014 5.067 5.073 409.517 425.596 2015 5.573 5.580 450.468 468,155

Table 4: Aircraft and Passenger Traffic

Source: Transportation Southeast Sulawesi Province

Aircraft and passenger traffic based on Table 4 shows that the flow of arriving and departing aircraft through the Halu Oleo airport in 2015 as much as 5573 times and 5580, while the flow of passengers arriving and departing the airport Halu Oleo as many as 450 468 and 468 155 people. Aircraft traffic flow air showed there overnight in the apron of Halu Oleo airport, and will be leaving in the morning. The airport of Halu Oleo has increased from year to year when compared with previous years, which is served by Airlines Lion Air Merpati Nusantara Airlines, Sriwijaya Air, Garuda Nusantara Airlines, Susi Air and Avia Star.

Passenger Transport Conditions

To view the state of the transportation of passengers arrival in South Konawe District can be seen from the potential development of the transport system of passenger transport in the region.

Land Transportation Modes

In order to realize the transport system South Konawe the future, need to be integrated in one unified transport system of passenger transport is certainly based on the potential of natural resources. Besides the existence of South Konawe districts refer to the mainland and the islands of Southeast Sulawesi, will experience an increase in traffic volume in the future along with the development of transport sector development policies and regional and national.

Network Infrastructure

Existing road network infrastructure South Konawe already be good, the development of which requires attention

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is improving the quality of roads. The length of the road is now fulfilling its service area. Conditions in the future with an estimated population by the end of the planning is as much as 314 156 lives which means that accessibility index population in 2030 according to the length of the road is still met, which is equal to 0.2 where the population density up to 2030 is 69.59 people / km2. Improved road function is the basis for further development, especially regarding the authority over the maintenance and supervision of the road, so the implementation of the construction of the road network can be directed properly in accordance with the scope of each system level road functions. In general, roads are improved functions need to adjust to orientation of policy development or establishment of building demarcation line (GSB), row street which is expanding, while activity and physical development is already underway.

The existence of the three terminal type C South Konawe not functioning optimally suitable orientation of the development of services of carriage, if the scale of transport services of passengers between the District and the orientation of the movement in the future South Konawe has the potential for the development of terminal type B in the capital districts (Andoolo) than the terminal types B in Ranomeeto. Development of Terminal type B in the Andoolo because it is the district capital as a center of activity and service, in terms of geographical area is very close to Kolaka, Bombana and Konawe. Development of Terminal in South Konawe by considering several conditions including, density and movement of vehicular traffic, the traffic of people, the integration of intra and inter-modal and environmental factors.

Network Services

Road transport service network in South Konawe in the future, increased in line with population growth and economic growth. Public Transport projections indicated Table 5.

Table 5: Projected Public Transport

Num	Year	Total Public Transport		
1.	2020	996		
2.	2025	1171		
3.	2030	1377		

Source: Results of Analysis

Based on Table 5 shows that the number of rural and city transport will increase in 2030, because the number of people who travel every day also increased. To meet the needs of the population movement, of course, need a tool that can be used. The amount of transport needed by 2030 (assuming that the frequency of transport as much as 4 times / day, the load capacity of an average of 10 people and a load factor of 70%) is as much as 842 units or an increase of 121 units that would be in distribution in accordance with the potential movement in each of the districts and between districts. The transport of between cities within the province in future which generally use non bus expected to use the type of vehicle according to the classification of services, i.e. a minimum of three-fourths bus. This meant that passenger service could be improved, in addition to the allotment of the vehicle used is not appropriate.

Marine Transportation Modes

Network Infrastructure

National transport policy with the concept of traffic crossing the south, across the north and north-south traffic is expected linked entire islands large and small islands are located in realizing the archipelago insight. Ferry Transport has an advantage in connecting the islands or shortens the distance across the bay, strait or by sea because it can transport the vehicle along with its cargo of both goods and passengers. Some of the nodes ferry ports in Southeast Sulawesi province

that connects the national road, cross national and provincial road ends constructed and developed at this time.

Port facilities and infrastructure conditions Torobulu at the South Konawe need to be developed to provide convenience for users of transportation services is. Such as the addition and expansion of ports, expansion of the passenger waiting area, terminal arrival and parking of passenger transport vehicles, the realignment of the harbor office, so it is not chaotic and dirty. While the activities of the crossings for people Amolengu (Sub district Kolono) associated with the activity patterns of society that generally leads to North Buton, can utilize the Port Amolengu using a modified type of fishing vessels as a means of transport of passengers and goods with limited capacity. Neither society of Moramo - Laonti can use Lapuko port (Sub district Moramo) with the use of fishing vessels equal to that used in the current Amolengu port. Amolengu port will be developed into a port Ferry because it is the only link between the mainlands of Southeast Sulawesi North Buton. In this time quay port Amolengu still tentative and using wood. Distance from Amolengu (South Konawe) to Labuan (North Buton) can be reached with a time of 1 hour using a timber ship.

Network Services

Network transport services crossing from the ferry ports Torobulu, geared to connecting mainland Southeast Sulawesi through South Konawe with Tampo Muna, and smells. In Muna himself ready operated ferry ports Tondasi (Muna) -Bira (Bulukumba South Sulawesi). This means that the most likely people, who live in Bugis Makassar South Konawe, can take advantage of this port of Torobulu-Tampo and Tampo use of land transport towards Tondasi-Bira Bulukumba, South Sulawesi Province.

For port - Labuan Amolengu can shorten the distance from Kendari to the Capital of North Buton and Buton. Crops and the potential of the area that will be marketed from North Buton and Buton can quickly arrive in the capital of Southeast Sulawesi (Kendari) through this ferry ports. Thus South Konawe society will easily and smoothly perform the movement because of the condition and status of the road network will increase and give the opportunity areas that had remote will soon open and can be reached by vehicles passing through this route.

Table 6: Projected Passenger Crossing Torobulu-Tampo

Num	Year	Number of Passengers
1.	2020	358.034
2.	2025	502.162
3.	2030	704.309

Source: Results of Analysis

Based on Table 6 shows that passenger growth in 2020 and 2030 is very much improvement. KMP capacity for passengers until the end of the planning is still insufficient but services need to be upgraded as improvements in some parts of the terminal.

Air Transportation Modes

Network Infrastructure

The Haluoleo airport required providing optimum service flow of passengers and goods to support the activities of the tourism trade as well as other activities in Southeast Sulawesi. The airport development is often the most fundamental is owned runway as it can also affect the type / types of aircraft operated. The airport runway length is 2500 m, with the condition of the asphalt surface is equipped with taxiways and aprons. The development of runways faced problems namely in terms of the topography of the airport is located in a hilly area and therefore contributes to the extension of the

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runway because of the limited land area.

Network Services

Air transportation services based on the number of routes to and from the airport, where N is categorized service flights on the primary route, service and pioneering. The Haluoleo airport has 5 routes, Namely Makassar, Surabaya, Jakarta, Bau-Bau, and Wakatobi. The existence of the airport is of course not only to support tourism activities, but rather to meet the needs of population movements in Southeast Sulawesi province in general and in particular South Konawe quick and cheap. With the enhancement and improvement of the airport, in the future is expected to be augmented its service network by opening its routes, to the eastern part of Indonesia, such as Ambon and Papua. So that people who will be traveling to Ambon and Papua no longer need to transit in Makassar. It also will be open service flights Kendari-Yogyakarta.

Table 7: Projections and Passengers

Years	Aircraft Traffic		Passenger		
1 cars	Arrival	Departure	Arrival	Departure	
2020	8.975	8.986	725.483	753.968	
2025	14.454	14.473	1.168.864	1.214.273	
2030	23.279	23.309	1.882.468	1.955.599	

Source: Results of Analysis

The Haluoleo airport according to Table 7 shows that the increase in the movement of aircraft arriving and departing at 2030, namely 23279 and 23309 movements, while movement of passengers arriving and departing through the Haluoleo airport namely 1,882,468 and 1,955,599 passengers. the number of passengers departing greater than passengers arriving, it demonstrates the need for development in the future to anticipate the high transport demand. Air capacity is still insufficient at the moment but in the future there should be capacity-building with the addition of aircraft that serves a variety of services so that these services can be a maximum passenger in giving satisfaction to users of air transportation.

Development Strategy Mode of Transportation

The strategy used in the development of passenger transport in South Konawe done using SWOT analysis (strength, Weakness, Opportunity and Threat). SWOT Matrix illustrates how the opportunities and threats facing can be tailored to the strengths and weaknesses, so as to formulate measures a strategic step in the development of passenger transport. By looking at the elements held in the SWOT analysis is then performed weighting of the elements that have been identified earlier, so that can know the position South Konawe and what the right strategy is used to overcome the problems in the development of passenger transport. Based on fundamental strategies mentioned above, generally step development strategy according to the type of transportation mode is described as follows:

Road Transport Development Strategy

The strategy for the development of road transport that will be applied as follows:

- The performance improvements of roads and road network expansion
- Provision and improvement of terminal (road transport node) type B and C
- The balance of supply and demand of public transport

- Increasing the market share of public transport
- Increasing the role of government in the field of public transport
- Optimizing the utilization of terminal
- The development of intermodal freight services network / multimodal
- Develop a public transportation route and provides an easy route permits urban transportation in the province (UTIP) and urban transportation between provinces (UTBP)

Air Transportation Development Strategy

The strategy for the development of air transport which will be applied as follows:

- Assessment of aviation safety and security
- Development of the Haluoleo airport's runway especially, apron and terminal arrival and departure
- Development of Haluoleo airports services with the proposed opening a new route
- Development of Haluoleo airport infrastructure
- Organizing the area around the Haluoleo airport in particular housing located in the area of aircraft noise.
- Improve the performance of transportation services.

Transport Development Strategy and Sea Crossings

The strategy for the development of transport and sea crossings that will be applied as follows:

- Accelerating the development of Lakara seaports
- Development of Amolengu ferry port and harbor in Moramo
- Development of ferry port infrastructure in Torobulu
- Development of ferry port services in Torobulu
- To enhance the safety of shipping and ferry as maintenance passenger ship, and ship navigation tools.
- Improve the performance of transportation services.
- Improvement of quality human resources.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the analysis that has been done, it can be concluded that:

Condition current passenger transport, South Konawe less effective and efficient. System passenger transport
services, not be hierarchical well as each land freight transport services in particular have not served to the
passengers to their destination. Development in the future is needed integration of development programs through
inter-sector coordination, both locally and regionally in order to create an integrated transport system.

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• In a SWOT analysis, identified 17 strategic program for the development of passenger transport in South Konawe. The strategies are priorities to be implemented are the development of network infrastructure and service modes of land transportation, air and sea are implemented in an integrated manner.

Recommendations

- In order to create an integrated multi-modal transportation system, it takes local transportation planning study as a follow-up of local transport level and National Transport Level.
- Development of passenger transport services network should be carried out evenly throughout the region, accompanied by the necessary infrastructure development.
- Planning and construction of transport systems must be integrated intermodal, in order to achieve harmonization of the implementation of the transport system that is effective, and efficient.

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